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THE GARDEN CALENDAR

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U. S. Department of Ag stare

A radio discussion by W. R. Beattie, Bureau of Plant Industry, delivered in the Department of Agriculture period of the National Farm and Home Hour, broadcast by a network of 48 associate NBC radio stations, Monday, July 27, 1936.

Hello Folks. We had an old-fashioned downpour of rain here at Washington the other night, the kind of storm that rumbles and threatens for an hour or two then all of a sudden breaks loose with a gust of wind and a sudden downpour. Rains like that are not the best because too much of the water runs off and there is liable to be considerable damage done, but our crops were getting pretty dry and we needed that rain as well as two or three more gentle ones since. I hope all of you have had good rains on your fields and gardens and that you can go ahead with your late season plantings.

Lately I've been getting a lot of questions about tomatoes and lima beans failing to set. They blossom the inquirers say, then the blossoms drop off just as though they were burned. The fact of the matter is that blossoms are burned by the intense heat that we have been having. When the thermometer gets up in the nineties or around 100 degrees it destroys the pollen of both tomatoes and lima beans, and not being polinnated the blossoms shed or drop off. Too much nitrogen and a very heavy growth of vine, or the application of too much water sometimes has the same effect but in most cases it is simply the heat that is causing the trouble.

Partial shading of the tomato vines will sometimes cause them to set a good crop, or by going over the vines each morning after the dew is off and slightly jarring each branch with a light stick or a light cane will often transfer the pollen from one part of the flower to another and those flowers will be fertilized before the day becomes so hot as to destroy the pollen. And here is another question about tomatoes. What causes the dry rot on the blossom end of tomatoes?

In this case it is easier to tell you the remedy than what causes the trouble. In has been found that this trouble occurs only when there is a deficiency of moisture in the soil and that a good watering or a nice soaking rain will usually check the trable. Mulching the surface of the ground to protect the roots of the ton toes from the heat of the sun also seems to be of some help. Watering the plants during dry periods has been found to be the means of preventing the development of this trouble. In preparing the ground for tomatoes it is well to avoid the use of heavy applications of nitrogen, especially in the form of manure, and to increase the superphosphate. The tomato is one of our garden vegetables which do not respond favorably to the use of too much nitrogen.

The shedding of the blossoms of lima beans is due to the same causes as in the tomato, too much nitrogen and too much heat. While lima beans

require a fairly rich soil they will not stand an oversupply of nitrogen and if given too much nitrogen they make an excessive growth and shed their blossoms.

And while we are on questions and answers, here is one that we get from hundreds of our gardeners every summer. "What makes my cucumber vines bloom and bloom but set no cucumbers?" You old-time gardeners know that this is perfectly natural for the cucumber and the squash, pumpkin, the melons and all of our vine crops have two kinds of flowers, the male or staminate flowers that furnish the pollen, and the female or pistilate flowers that make the fruit. When the vines first begin to blossom they bear a great many of the male or staminate flowers. Later the other type of flowers appear and the vines soon begin to set fruit. If you examine the flowers you will find that the so-called pistilate flowers have the little cucumber, squash or melon, as the case may be, just back of the blossom, in other words the blossom is located on the outer end of the fruit.

That brings me to another of the perennial questions: "Is a tomato a fruit or a vegetable." What do you think about it. I'll bet we get a thousand letters every year asking that question. Speaking from a botanical standpoint the tomato is a fruit, in fact anything that contains seeds is a fruit because the seed is the fruit of the plant, but in the garden the tomato is regarded as a vegetable while the melons such as muskmelons and watermelons are regarded as fruits. In general, anything that is cooked and eaten in the body of the meal is classified as a vegetable while anything that is eaten as a dessert is considered a fruit. The question of the tomato and melon have been passed upon by the Supreme Court of the United States, the tomato being classified as a vegetable and the melon as a fruit. This decision was rendered in a case where the rate of import duty on tomatoes and melons was involved.

If time were to permit I could give you a number of other questions of a recurrent nature that come to us through the mails. While speaking of mail I wish to once more request those of you who write to the Department to write your name and address more plainly. It sometimes takes longer to decipher the name and address than it does to answer the letter. I'll bet some of you could not read your own postcards, much less your names if I were to send them back to you, - but, so long until next Monday.

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